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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,948	09/05/2003	Mohamad Nourmohamadian	ULTERA.008A	8896

28222 7590 05/12/2006

LAW OFFICE OF GLENN R. SMITH  
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TRABUCO CANYON, CA 92679-1163

EXAMINER
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CAMPOS, YAIMA

ART UNIT	PAPER NUMBER
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2185

DATE MAILED: 05/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/655,948	Applicant(s) NOURMOHAMADIAN ET AL.	
	Examiner Yaima Campos	Art Unit 2185	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The examiner acknowledges the applicant's submission of the amendment dated March 6, 2006. At this point claim 14 has been amended and claims 1-13 have been cancelled. Thus, 1 claim is pending in the instant application.
2. The indicated allowability of claim 14 is withdrawn in view of the newly discovered reference(s) to Dailey et al. (US 2004/0098244). Rejections based on the newly cited reference(s) follow.

#### **I. REJECTIONS BASED ON PRIOR ART**

##### **Claim Rejections - 35 USC § 102**

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. **Claim 14** is rejected under 35 U.S.C. 102(e) as being anticipated by Dailey et al. (US 2004/0098244).
2. As per **claim 14**, Dailey discloses  
“A virtual tape stacker comprising:” as [“**Tape drive emulator 6**” (Figure 1)]  
“a plurality of virtual tape volumes configured for storing sequential data on a random access data storage device” [With respect to this limitation, Dailey discloses “**tape drive emulator 6 writes the data sequentially within the logical storage areas of non-tape storage medium 5**” (Page 3, paragraph 0035) wherein “**non-tape storage medium 5**” is of “random access nature” (Page 3, paragraph 0039) and may comprise “disk-shaped magnetic storage

**medium, a solid-state storage medium, an optical storage medium, a magneto-optical storage medium, and a holographic storage medium” (Page 2, paragraph 0030)]**

**“a volume management table indicating a sequential order for said virtual tape volumes and a loaded one of said volumes” [Dailey discloses this concept as “to access a specific data file, tape drive emulator 6 need only access the library of tape marks to identify a target file mark associated with the file data file, and map the target file mark to a starting one of the logical storage areas for immediate access to the stored data” (Page 3, paragraph 0039) wherein “tape drive emulator 6 sequentially writes the data to the logical storage areas of data region 12, and maintains library 13 of tape marks to record tape marks, such as file marks, sequential file marks, block marks, and the like” (Pages 3-4, paragraph 0046)]**

**“a virtual tape manager adapted to transfer data between said loaded volume and an application program;” [With respect to this limitation, Dailey discloses that “tape drive emulator 6 receives access commands from host computing device 8 in accordance with the tape drive communication protocol (19)” wherein access different types of access may be made (Page 5, paragraph 0064). See (Page 5, paragraph s 0065 and 0066) for examples of “WRITE” and “READ” commands]**

**“and a physical tape volume,” [With respect to this limitation, Dailey discloses “cartridge storage 82” (Figure 10) and explains that “cartridge storage 82 may include a number of conventional data tape cartridges housing magnetic tape, as well as a number of data tape cartridges housing non-tape storage media” (Page 7, paragraph 0081 and Figure 10)]**

**“wherein a last one of said virtual tape volumes is previous to said physical tape volume in said sequential order and a first one of said virtual tape volumes is next from said physical tape**

volume in said sequential order” [Dailey discloses this concept as “library control unit 76 generates control signals to direct a robot arm 10 to retrieve the appropriate data tape cartridge from cartridge storage 82 and insert the data tape cartridge into one of drives 84” (Pages 6-7, paragraph 0080 and Figure 10) wherein “drives 84 may include one or more conventional tape drives and one or more tape drive emulators for receiving data tape cartridges housing non-tape storage media” (Page 7, paragraph 0084); “cartridges housing different types of media are mechanically indistinguishable by automation unit 78” (Page 7, paragraph 0082) and explains that “tape drive emulator 6 writes the data sequentially within the logical storage areas of non-tape storage medium 5” (Page 3, paragraph 0035). Therefore, the system described by Dailey discloses a tape drive emulator that contains “conventional tape cartridges” (physical volumes) and “non-tape storage media,” (logical tape volumes) all stored within the same logical storage areas wherein data pertaining to a “conventional tape cartridge” or physical tape volume is stored within the same virtual space as “virtual tape volumes” that belong to “non-tape storage media,” in sequential order].

## **II. CITATION OF RELEVANT ART**

3. The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure.
4. The following reference teaches a virtual apparatus having a storage area for storing virtual tape volumes wherein data is transferred from a real tape volume to a virtual tape volume.

**U.S. PATENT NUMBER**

US 6,557,073

The following reference teaches duplication of logical volumes in a virtual tape system.

**U.S. PATENT NUMBER**

US 2004/0044830

**III. CLOSING COMMENTS**

**Conclusion**

**a. STATUS OF CLAIMS IN THE APPLICATION**

The following is a summary of the treatment and status of all claims in the application as recommended by M.P.E.P. § 707.07(i):

**a(1) CLAIMS REJECTED IN THE APPLICATION**

Per the instant office action, claim 14 has received a second action on the merits and is subject of a second action non-final.

For at least the above reasons it is the examiner's position that the applicant's claims are not in condition for allowance.

**IV. DIRECTIONS OF FUTURE CORRESPONDENCE**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yaima Campos whose telephone number is (571) 272-1232 and email address is [Yaima.Campos@uspto.gov](mailto:Yaima.Campos@uspto.gov). The examiner can normally be reached on Monday to Friday 8:30 AM to 5:00 PM.

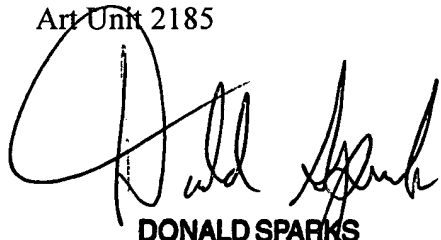
**IMPORTANT NOTE**

6. If attempts to reach the above noted Examiner by telephone or email are unsuccessful, the Examiner's supervisor, Mr. Donald Sparks, can be reached at the following telephone number:  
Area Code (571) 272-4201.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 5, 2006

Yaima Campos  
Examiner  
Art Unit 2185



**DONALD SPARKS**  
SUPERVISORY PATENT EXAMINER